

THOMAS G. NEWMAN,

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Moan on, ye cold and winter winds, Against the frosted window-panes; Ye cannot change the love that binds, With strong and fervent chains, The heart that beats and never wanes.

Lash in your might the aged tree,
Spare not his form, though bending low,
Nor let a leaf there clinging be;
But blow, ye winds, and blow,
Ye cannot change the heart in me.

—Arthur's Home Magazine.

Twenty-Five Years—a quarter of a century—is now completed by the American Bee Journal. This issue begins a new quarter of a century of its history. Its character and usefulness in the past is its guaranty for the future. We have no time to moralize over the situation—but will work for the interests of bee-keepers in the future, as we have done 16 years, since the Bee Journal came into our hands. We ask all to work with us, for the best interests of the pursuit.

For the Many expressions of gratitude for the work done by the General Manager of the National Bee-Keepers' Union, during the past four years, all will please take this acknowledgement. Though time is too limited to answer each one privately, he appreciates all the "kind words" exceedingly.

Mr. G. H. Ashby, of Albion, N. Y., puts his thoughts into these vigorous words:

A person would be considered very mean that would require another to work for his direct interest without compensation; but that is just what bee-keepers (who are not members of the Union) are doing. Why not all join hands, for mutual protection, and cause our enemies to cower by actual force of numbers? The stronger we become, the less suits we will have to defend. Now, brother bee-keepers, come to the front with your great influence and a little money, and let us all have an equal interest in the good work.

The Way to Do It.—The City News, New Castle, Pa., copied a lying article about comb honey from the Philadelphia Record, which has been repeatedly refuted, but the latter paper, though often supplied with marked copies with refutations of its falsehood, has never had the honesty to retract a word of it. (See page 436 of last year's BEE JOURNAL.)

Mr. T. S. Sanford wrote a reply, but the City News could not find room for it. He took it to the Courant, an opposition paper, and there it found a place. Mr. Sanford told the readers about the origin of the falsehood; and stated that Bro. Root's offer of \$1,000 for proof of the existence of the factory where artificial comb honey is manufactured, is still good. He then adds:

The fact that he has never had an application for the money is good proof that there is no such thing. There may be dishonest bee-keepers as well as dishonest people in other trades and callings, but it is a fact that bee-keepers as a class, will compare favorably for honesty with our best citizens. It is a shame to injure their calling by publishing such articles as the one referred to. A paper that can find room to publish a falsehood, but cannot find room to publish the truth regarding the matter, in my opinion, has very little principle.

That is a good way to correct, as far as possible, such stories. Let each bee-keeper who sees such things published, write a contradiction, and send it to the paper where the falsehood appeared. Keep a copy of it, and if that paper will not publish it, another one will, and thus the truth may be served.

To Affiliate with the International is just the thing for all local associations to do. Some have written us to state how it should be done. We will reply to all through the BEE JOURNAL, our time being too much occupied to reply to each separately. Just introduce a resolution to affiliate with the International Society, and have it carried—then vote that the Treasurer send \$5.00 (the fee) to the Secretary of the International (C. P. Dadant, Hamilton, Hancock Co., Ills.,) and he will so record it, and send receipt for the same.

The Purdue University, La Fayette, Ind., School of Agriculture, will hold a special winter course in Agriculture and Related Sciences, including lectures in Agriculture, Horticulture, Veterinary Science, Agricultural Chemistry, Zoology, Botany, Economic Entomology and Farm Law, commencing Tuesday, Jan. 16, 1890, and continuing six weeks.

Gleanings for 1889 winds up with a flourish. The number for Dec. 15 contains a Picture Gallery consisting of 16 pages filled with views of apiaries. Gleanings in Bee-Culture is always fresh, lively, original and interesting, and well deserves its great success.

The Union.—The dues and votes from the members of the National flee Keepers' Union have been coming in quite lively lately, and the following from Mr. Wm. Muth-Rasmussen, of Independence, Calif., is a fair sample of the letters accompanying the votes:

FRIEND NEWMAN:—I herewith return the voting blank of the Bee-Keepers' Union. I see no reason for the change of officers, and as long as they are not weary of well-doing, I am content to keep the old Board. Please accept my personal thanks for your efforts in behalf of the Union. If bee-keepers were less apathetic, we might give the Manager something more substantial than mere "Thanks" for his time and trouble.

WM. MUTH-RASMUSSEN.

It is quite evident that there will be no change in the officers when the votes are counted. So we must prepare for another year's active warfare, and hope at the end of 1890 to make as good a showing in the Annual Report as the one just made. "Defense" is our watchword, and "Victory" our motto!

The First Vice-President of the International, Mr. Eugene Secor, is receiving congratulations at home and elsewhere. The Winnebago Summit, of Dec. 19, 1889, contains this complimentary notice:

Mr. Eugene Secor was elected First Vice-President of the International Bee-Keepers' Association, the annual meeting of which was held at Brantford, Ont., Dec. 4 to 6. Mr. Secor has had large experience in bee-keeping, and has written many articles on this subject, and is regarded as an authority on this question. He also had the honor of having one of his Songs set to music expressly for this occasion, and which was sung at this meeting. Mr. Secor as a bee-keeper, horticulturist, farmer, and writer, is winning for himself an enviable reputation, which, as a matter of course, is highly complimentary to him, no less than gratifying to his friends.

Father Langstroth has not improved in health since last we mentioned the matter, we are sorry to learn by a letter just received from his daughter, Mrs. Cowan. About eighteen months ago a subscription to insure an Annuity for him was started, and we subscribed \$25.00 per annum; others pledged similar amounts, but we are pained to learn, after enquiry, that quite a number have failed to send the amounts they have pledged. Where it cannot be afforded from a limited income, we have nothing to say-but where plenty abounds, we hope that no negligence will prevent the Annuity from being kept up. Father L. needs it, in his infirmity and advanced age-and we would urge those who have abundance, to share with him-and thereby entitle them to reap the rich rewards which such "good deeds" ensure.

The Last Volume ended with Query No. 676. Just think of the vast amount of information afforded in that number of Questions, and twelve thousand answers! It pays to take and read a good bee-paper.

GLEANS OF NEWS.

Bees' Christmas.—The weather has been warm, and the sun has shone out strongly between the showers, so that the bees have been able to fly quite frequently. The winter cannot be a long one now, being cut short at one end. The following letter from Mr. Youngman shows how the bees spent Christmas in his apiary:

Lakeview, Mich., Dec. 25, 1889. It being quite warm to-day, and the sun shining, the bees had a merry Christmas. There has been no cold weather, and very little snow up to date, and it will be a short winter for the bees, and if they are well provided with stores, one may almost insure their wintering well. Bees went into winter quarters rather light in stores, as the honey crop was lighter than usual, the stores being almost bare of comb honey.

Last season was the most remarkable for swarming ever known here. Bees absconded to the woods in great numbers. A great many trees were found and cut. Some were found in logs and hollow roots. I have 3 swarms taken from as many trees, all at one time.

S. J. YOUNGMAN.

Exposition at Vienna in 1890.-

An Agricultural Exhibition is to be held in Vienna from May to November, 1890, under the auspices of the Imperial Royal Agricultural Society of Vienna.

The object of this exhibition is to give as complete a representation as possible of the actual condition of the Agriculture, Forestry, Horticulture, Gardening, Bee-Culture and Irrigation, and to promote and diffuse a knowledge of the latest inventions and discoveries relating to those subjects.

A large number of important premiums in money as well as in medals, is assured the firms of the various industrial circles, which may spur them to do their best in the coming contest.

Some Astonishing Figures.—The firm of Chas. Dadant & Son report having made and sold 59,551 pounds of comb foundation during the season of 1889. Of this, 34,498 pounds was brood foundation, and 25,053 pounds surplus foundation.

The 34,498 pounds of brood foundation could fill 210,520 Langstroth brood frames, or 21,052 ten-frame Langstroth hives; and if only one-inch strips had been used, there would have been enough to make guides for 168,416 hives. This number of sheets, 8x16½ inches, if piled on top of one another, would make a pile 2,924 feet high, or nearly three times the height of the Eiffel tower. If placed at the end of one another, they would make a line nearly 55 miles in length.

The 25,053 pounds of "thin" and "extra thin" foundation would fill 2,605,512 sections $4\frac{1}{4} \times 4\frac{1}{4}$ inches. This will give an idea of the extent of the production of comb honey in the United States, for most for this comb foundation has been sold in this country, and the greater part of it has ment's delay.

undoubtedly been used the present year. Let it be remembered that, although this firm are the largest manufacturers of comb foundation in the world, they are by no means alone, and outside of a number of other manufacturers, there are hundreds of bee-keepers who make their own comb foundation, even if their number is more limited than it was at first.

This 25,058 pounds, if cut into sheets the right size for 4½ sections, and the sheets piled upon one another, would make a pile 16,702 feet high, or over three miles; or if placed at the end of one another, they would make a line of beeswax 154 miles in length.

The Officers and Honorary members of the International for the present year are as follows:

President—R. L. Taylor, Lapeer, Mich. First Vice-Pres.—Eugene Secor, Forest City, Iowa. Secretary—C. P. Dadant, Hamilton, Ills. Treasurer—Dr. C. C. Miller, Marengo, Ills.

VICE-PRESIDENTS,
J. B. Hall, Woodstock, Ont.
O. L. Hershiser, Buffalo, N. Y.
E. R. Root, Medina, O.
Prof. A. J. Cook, Lansing, Mich.
Mrs. L. Harrison, Peoria, Ills.

ADDITIONAL NAMES OF MEMBERS. E. L. Goold, Brantford, Ont. W. H. Shapley, Brantford, Ont. S. T. Petiti, Belmont, Ont.

HONORARY MEMBERS.

*F. W. Vogel, Lekmanshofel, Prussia.
Rev. George Kleine, Luethorst, Prussia.
*Andreas Schmidt, Eichstadt, Bavaria.
Rev. John Dzierzon, Karlsmarkt, Silesia.
*Baron A. Von Berlepsch, Munich, Bavaria.
*Baroness L. Von Berlepsch, Munich, Bavaria.
*Prof. C. T. E. Von Siebold, Munich, Bavaria.
*Prof. C. V. Son Siebold, Munich, Bavaria.
*Prof. C. V. Riev, Washington, D. C.
*M. Quinby, St. Johnsville, N. Y.
L. Gerster, Berne, Switzerland.
*T. W. Woodbury, Mount Radford, England.
Mrs. F. A. Dunham, De Pere, Wis.
T. F. Bingham, Abronia, Mich.
E. Bertrand, Nyon, Switzerland.
Frank R. Cheshire, London, England.
Rev. Wm. F. Clarke, Guelph, Ont.
Prof. C. V. Riley, Washington, D. C.
Hon. Edwin E. Willets, Lansing, Mich.
Deceased.

A Special Club Rate.

A Magazine of the choice literary character which the ILLUSTRATED HOME JOURNAL sustains, will add many pleasures to any "family circle." Its beautiful illustrations and interesting reading-matter will make it heartily welcomed at every "fireside" in the land.

We desire that every one of our readers should secure its regular visits during the year 1890, and in order to induce them to do so, we will make this tempting offer:

We will Club the AMERICAN BEE JOURNAL and the ILLUSTRATED HOME JOURNAL, and mail both periodicals during the whole year 1890 for \$1.50, if the order is received at this office before January 31, 1890.

Such a remarkably low club rate as the above, should induce every reader of the BEE JOURNAL to accept it without a moment's delay.

Honey Almanac.

This Honey Almanac places in the hands of bee-keepers a powerful lever to revolutionize public sentiment, and create a market for honey, by making a demand for it in every locality in America.

Each alternate page is an illustrated calendar for the month—making a complete Almanac for the year 1890.

Here is what is said of it by those who have seen the Honey Almanac:

I have disposed of nearly all of my Honey Almanacs. They are excellent "salesmen." I think that I shall have to send for more.— Mrs. S. E. Sherman, Salado, Tex.

The Almanacs are making business lively. I sold 230 pounds to-day to my neighbors.

—O. S. Compton, Glenwood, Mich.

Its 32 pages are filled with interesting facts, figures and suggestions concerning the uses of Honey for Food, Beverages, Cooking, Medicines, Cosmetics, Vinegar, etc. Also, its effects on the human system are tersely noted; a brief refutation is given of the Wiley lie about manufactured comb honey; a short dissertation sets forth the mission of bees in fertilizing the flowers, and increasing the fruit product. Instead of being an injury to fruit, bees are the fruit-growers' best friends.

Prices:—25 copies for \$1.00; 50 copies for \$1.50; 100 for \$2.50; 500 copies for \$10.00; 1,000 copies for \$15.00, delivered at the freight or express office here. The bee-keeper's Card will be printed upon the first page, without extra cost, when 25 or more are ordered at one time. Postage, 40 cents per 100 extra. All orders can now be filled as soon as received.

Excellent Paste.-To make paste that will stick honey-labels to glass, tin, etc., take two ounces of clear gum arabic, one ounce and a half of fine starch, and onehalf ounce of white sugar. Pulverize the gum arabic, and dissolve it in as much water as the laundress would use for the quantity of starch indicated. Dissolve the starch and sugar in the gum solution. Then cook the mixture in a vessel suspended in boiling water, until the starch becomes clear. The cement should be as thick as tar, and kept so. It can be kept from spoiling by dropping in a lump of gum camphor, or a little oil of cloves or sassafras. This cement is very strong indeed, and will stick perfectly to glazed surfaces, and is good to repair broken rocks, minerals or fossils.

Sectional Committee for Rearing of Bees.—Chairman, Mr. Hermann Bernges, late forest manager, editor of the Bienenvater (Bee-Father). Second Chairman, Mr. Jos. Kamptner, house-proprietor at Unter-Dobling. Secretary, Mr. Alois Scholtys, officer of the Imp. R. Court and first lieutenant. Editor, Mr. Anthony Pfalz, editor of the Imkerboten aus Oesterreich, bee-master at Deutsch-Wagram, Austria.

The Canadian Government feels like assisting apiculture to the extent of its ability. At the late Convention at Brantford, this was exhibited by the following

Prof. Wm. Saunders, Superintendent of the Dominion Experimental Farms at Ottawa and elsewhere, was called to the platform by President Mason. In a short address Prof. Saunders stated that while he was not well versed in bee-keeping, yet he hoped to learn more of it in the near future. Entomology seems closely connected with Entomology seems closely connected with the scientific part of bee-keeping, and in this he was very much interested.

He explained the work of the Dominion Experimental Farms, and added that it was the intention of the Government to take up all lines in any way connected with agricultural pursuits as soon as it was possible to reach them. On one of the experimental farms in Manitobe the Superintendent farms in Manitoba, the Superintendent

no honey, have to produce enormous quantities of pollen to secure fruit fertilization.

Examples of this are corn and rag-weed, and even then these have to be congregated in large numbers to help fertilize each other. To carry out this fertilization, however, other insects than honey-bees are needed. For instance, the corollas of the clover blossoms are too long for the honeybees, but the longer proboscis of the bumblebee here comes into play. If the bees hurt flowers, we should find the corollas of some of the best honey-producing flowers broken and destroyed, but we do not.

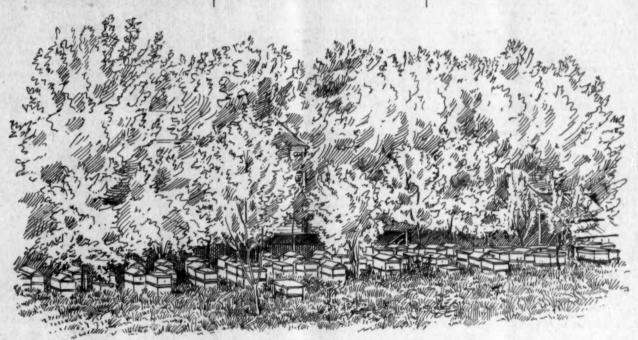
As to the action of bees upon fruit, Mr. D. said that while they often draw the juice from injured fruit (poor stuff, too), they never injure sound fruit. The mandibles

siring to purify such receptacles so as to be profitably used again:

profitably used again:

To remove the astringent qualities from a new oak cask, or the taste from a barrel which has held alcoholic liquor, nothing is necessary but to fill with cold water and let it soak a few days, changing the water two or three times. An old barrel which has been used for cider or vinegar, should be purified by sulphur fumes. Invert the barrel over a shovel or dish of live coals, upon which brimstone has just been thrown, and let it remain there for half an hour to an hour. Then soak the barrel with clean water, in which a pound of soda or a hour to an hour. Then soak the barrel with clean water, in which a pound of soda or a shovelful of ashes has been dissolved.

Jacob Wollerskeim, of Kauffman, Wis., sends us a sample of his comb foundation, which has high side-walls and is well made.



Apiary of Mrs. Martha Anderson, Bushnell, Ills.

has a number of colonies of bees with which he is experimenting.

Mr. Saunders promised the assistance of the faculty at Ottawa in any of the branches wherein bee-keepers were interested, and he thought that they could very often help solve difficulties in the entomo-logical and botanical departments of beekeeping.

Bees and Horticulture.-Mr. C. P. Dadant, at the recent meeting of the Illinois Horticultural Society, in discussing the relation of bees to horticulture, is reported to have said there are two main divisions of the question-the relation of bees to flowers, and their action upon fruit.

Bees are created undoubtedly to help in fertilizing flowers. This is too well known to need further proof, though a clear evidence that honey exists in the blossom to attract insects, for blossom fertilization lies

of the bee are not made to puncture, they | The Edelweiss of the Alps. are round and entirely devoid of teeth.

He also referred to the relation of beeculture and horticulture as shown by their allied products-honey and preserves of different kinds; and the use of honey in wine making.

Purifying Casks for Honey .-Although we do not advise the general use of casks and barrels in the apiary, that have contained wine or alcoholic liquors, yet there are occasions when such receptacles can be used to excellent advantage, if cleansed, especially when the honey put into them is to be employed in feeding the bees in the spring, or for winter stores.

Chas. L. Carpenter, of New Jersey, in one of our valued agricultural exchanges, gives

This gem was sent us by L. Mrs. Harrison. The lines were written by an American lady who was traveling in Europe, and sent them to Mrs. H. by one of the party:

On Alpine heights there blooms a flower. So soft, so white, mid snow and ice, Well meet to grace the *Yungfrau's bower, And mortals call it *Edelweiss ; For white must all that's noble be, And bloom from earth far, far apart; So she that's robed in purity, Must bear an "Edelweiss" in heart.

The Yungfrau is a snow mountain near Interaken, and is a very grand sight to behold.

The Edelweiss is a little white flower, like our daisy, and has a yellow center, and its leaves are thick, like cotton. It is under the snow, and in no other place. Its home is on the Alps.

Clubs of 5 for \$4.00, to any addresses. in the fact that those flowers which yield the following method to pursue when de- Ten for \$7.50, if all are sent at one time.

"Which Shall It Be?"

A. E. N. Rich-(Ethel Etherton.)

Henceforth in this beautiful land of ours. One flower is to be the flower of flowers— Our national emblem, our symbol of might, Of patriotism, of truth and right.

Our national emblem, our symbol of might, Of patriotism, of truth and right.

Of our floral beaties from sea to sea, Countiess and curious, "Which shall it be ?" Shall it be the filly so pure and fair; fit emblem alike for bridal or bier? Or the queenly rose, white, pink or red—A coronet for a queenly head? Or bright-eyed pansy? Heart's-ease, if you will, So touchingly tender, so thoughtfully still—Or the daisy? where meadow grasses wave, In rocky rook, or by poet's grave—Or trailing arbutus? daintily sweet, In mossy bed at the tail pine's feet—The first sweet harbinger of spring, Faint-tinged with the red of the robin's wing; Though full of fragrance, yet lacking power, Too dainty—too scarce for the national flower. Or morning-glory? of varied hue, From the whitest white to the bluest blue—Or brillianty—popy, with tasseled head Of golden glory or richest red, Or the passion flower tinged to its petal tips With the crimson blood of a martyr's lips, Or the brilliantly beautiful orchids rare, Off twined in the gipsy maiden's hair, The snowball, peony, trumpet flower, Of primitive Puritan pride and power? Or stately sunflower, with gold-flecked disk, And golden rays which a world might risk? Into every heart it hath found its way For its loyalty to the god of day, And bears the likeness upon its face Of the god it turns to with modest grace, The floral symbol of life and light, Like the sun by day, like the stars by night. What is life but love s fount of eternal youth?

What is liberty but the light of truth? What is life but love's fount of eternal youth? What more beautiful thought could one flower

hold
Than this gold-eyed gem in its settings of gold?
Proudly the floral world might yield
To have it emblazoned on flag and shield;
But a floral rival, nor friend nor foe,
In like gold-wrought uniform all aglow,
Has leaped to the front with a strong, swift
bound
And with pride is holding the vantage ground,
As though let slip from the hand of God
And christened in failing, "the golden-rod."

Tall and graceful its golden plumes
Wayside, forest and field illumes,
And it gaily nods to each passer by,
Whether man of wisdom or maiden shy—
The youthful, the aged, the great, the small,
It has a bow and a smile for all—
Truly American; wonderful flower.

With the candidate's politic, pleasing power,
'Tis the flower of freedom! for everywhere
It raiseth up like the voice of prayer—
Springing spontaneous from the soil
With never a mark of mire or moil;
Wheresoever the foot of man hath trod
He hath measured all things with a golden-rod.

Tis the magic staff that lets him in
To the homes of virtue, the haunts of sin—
The wand that heals like an angel's wing
The heart of peasant, priest, poet, king,
Dame Nature, ever true to her law
Of correspondence, its beauty saw,
And scattered it broadcast over the earth
To symbolize true wealth and worth.

It is destined the flower of flowers to be In the "the land of the brave, the home of the free!". The ensign to herald a nation's power, The golden censor; the people's flower.—Sel.

Our Premium-List Supplement describes many articles of great merit, and that are useful in every family. We have carefully selected them to offer as premiums for getting up clubs for our JOURNALS. We for getting up clubs for our JOURNALS. We do this to induce our friends to devote a few hours of labor for us. Our JOURNALS are first-class in their lines, and are needed everywhere. We do not want any one's labor without remuneration, and the articles offered will pay for the labor of getting up clubs, and thus the arrangement will prove to be for our mutual advantage.

Full Sheets of Foundation vs Starters in Sections.

Written for the American Bee Journal

Query 677.—What per cent, more honey will be stored when using full sheets of foundation in sections without separators, than when using one-inch starters, and no separators?—C. P.

Not any .- WILL M. BARNUM. Nobody knows .- M. Mahin.

My experience says "no more."-H. D.

I have had no experience without foundation or separators.—A. B. Mason.

I do not know any one who can exactly tell.—C. C. MILLER.

Considerably more—perhaps 25 per cent. in a good season.—C. H. DIBBERN.

I will venture to say one-fourth more, but it may be more or less.—J.M. Hambaugh.

I cannot answer; it varies greatly. On the whole, I think that it pays to use foun-dation.—A. J. Cooκ.

A pound of beeswax costs 10 to 15 pounds of honey to the bees, so you can count it for yourself.—Dadant & Son.

It is hard to determine. By using full sheets of foundation, the bees are more facilitated in their preparatory work.—J. P. H. BROWN

The difference would vary with the degree of the honey-flow, etc., and no safer answer can be given.—R. L. TAYLOR.

If the season is a good one, you will likely be surprised to see how little the difference is. In my experience, the difference is not enough to make up for the leathery septum that full sheets of foundation give to the honey.-G. W. DEMAREE.

I do not know. I do not use full sheets of foundation, for beeswax will not digest in my stomach.—Mrs. L. Harrison.

Much depends upon the time of year, temperature, honey-flow, and other conditions. Sometimes, no more; and again, double the amount.—James Heddon.

That depends upon whether the honey-flow is light and of long duration, or heavy and of short duration. More honey will generally be secured when full sheets are used, especially with a light honey-flow.—
G. M. DOOLITTLE.

In my opinion, not so large a per cent. as we have been made to believe. I believe that a straight starter of foundation one inch wide is enough.—G. L. TINKER.

I have never tested this matter on large enough scale to speak positively, but I think that they will store more. That, however, is not the only reason for using full sheets—they fill the section more nicely.—Eugene Secon.

It would depend upon the locality, to at would depend upon the locality, to some extent. In my own, where honey comes in slowly, owing to lack of bloom, the foundation will give a considerably larger amount. Where honey comes in rapidly, I do not think much if any difference will be found. Much will depend upon whether the colony is composed of young or old bees.—J. E. POND.

This all depends, and depends and depends. Ordinarily it is better to use full sheets of foundation, if it is nice, and as thin as can be made. The ordinary apiarist can get more honey, as a usual thing, and certainly in better shape with foundation, than without, and the crop ships better.

These reasons are enough, without any mythical, percentage reason.—J. M. Shuck.

This question cannot be answered definitely. It depends upon many things which are uncertain. The difference is probably very little.—The Editor.

Proper Width of 1-Pound Sections Without Separators.

Written for the American Bee Journal

Query 678.—What is the proper width for the one-pound section (4)4x43 inches) when used without separators?—W. C.

One and % inches.-M. MAHIN.

One and % inches.—DADANT & SON.

One and % inches is a good width.—C. C. MILLER

One and 1/4 to 15/4 inches.-J. M. SHUCK. One and 23-32 inches, or 7-to-the-foot.-R. L. TAYLOR.

One and % inches, or 7-to-the-foot,— EUGENE SECOR.

One and ¾ inches, but for safe, salable ections, separators are indispensable.—J. M. HAMBAUGH.

I use a 1½-pound section, making the same 2 inches wide.—G. M. DOOLITTLE.

One and % inches, or 7-to-the-foot pleases me well.—A. J. Cook.

I find that 1% inches, if nearly filled with foundation; but with separators, 1% is better, as you get nearer to one-pound—H. D.

I do not know. Our "great lights" dif-fer on this subject, but about 22 cubic inches of comb honey weigh a pound, and there will be more honey in sections where separators are not used, than where they are.—A. B. Mason.

One and ¾ inches. Sections of even weight cannot be produced without full sheets of foundation, and separators. DIBBERN.

Just 1% inches scant, or 7-to-the-foot, either with or without separators. That seems strange, doesn't it? I would not have thought that the same width was right, both with and without separators, had I not proven it by radical and repeated tests.—James Heddon.

I believe that the 7-to-the-foot section is best, without separators; but I could not advise the most painstaking to use sections without separators. If we would produce the choicest comb honey, we must use wood separators, and the open-side sections.—G.

After trying the different widths made, I prefer 1% inches as the best width where no separators are used; and as I do not care to be bothered with more than one size or width, I use the 1%, with or without separators.—G. W. Demaree.

About 1% inches, in my judgment. Some bee-keepers of experience prefer 1½, and some 1¼ inches. In no case will sections be filled so as to weigh just a pound each—a variation of 2 to 4 ounces will usually be found.—J. E. POND.

Two inches is as wide as a section should be, but a $4\frac{1}{3}x4\frac{1}{3}$ section, 2 inches wide, will not hold one pound, unless it is unusually well filled out. Sections $1\frac{1}{3}$ or $1\frac{3}{3}$ will be filled out nicer and more perfectly than wider ones, although they will not hold a pound, if only $4\frac{1}{3}x4\frac{1}{3}$ inches.—J. P. H. Brown.

About 7-to-the-foot; but separators should be used, unless the greatest care is taken to assort when packing in crates for the mar-ket, to prevent rubbing and leakage.—The

CORRESPONDENCE.

SMOKING-BOARD.

Expelling the Bees from the Section-Cases.

Written for the American Bee Journal BY J. W. BAYARD.

Much has been written of late, and many enquiries made, as to the best and most effective method of expelling bees from the surplus stores. Smoke, being the acknowledged factor in terrorizing and driving as well as quiet-ing bees, has long been used for that purpose, and when judiciously and intelligently applied, it has been a most satisfactory agent.

My plan is inexpensive, simple and efficient, and, I trust, will command the attention of all bee-keepers who work their apiaries for comb honey. It is as follows

Take a smoothly-planed board just the size of the section-case, only about two inches longer; nail three strips {x} on the three face edges of the board, leaving one end open for smoke, and now it is ready for work, if the honey is ready to take from the

To do the work quickly, arm your-self with smoker, chisel, and smokingboard, located on some convenient hive or other place Now lift the hivecover clear away, turn back the enameled-cloth quickly from the case, pour in smoke rapidly between all the openings of the rows of sections, and in about one minute, if well done, it will frighten nearly all the bees below.

Then with chisel quickly remove the case to the smoking-board, cover the hive securely, and pour the smoke into the "pocket" between the board and and the air-current created thereby, will lift bees, smoke, and all to the surface, and with a light brush of long feathers, made from the tail of a turkey, whisk them off, and the work is done. I can do all this inside of eight minutes, on an average, and have the honey in the honey-house without a bee being left in a single

In this way I can go through a hundred colonies in a day, and lift all the surplus honey that is finished, without attracting the cupidity of a single

By operating the foregoing plan, no laggards are left behind to cut holes in the cappings, and otherwise mar the combs, then leave through some escape when they get ready.

Some have found fault with smokers

result of filling the smoker-furnace with fine, trashy stuff, instead of clean chips of rotten wood, that emit no sparks or soot. I use apple-tree wood for my smoker, and find that it is the best of all.

I find that the best time to remove surplus honey from the hive, is from 10 a.m. to 5 p.m., when the bees are largely in the fields. Early in the morning or late in the evening they are almost sure to sulk and adhere to their stores.

Athens, Ohio.

IN COUNSEL.

Report of the Northern Illinois Bee-Convention.

The Northern Illinois Bee-Keepers' Association met in annual session in the Supervisor's room of the Court House at Rockford, Ills., on Dec. 17, with Vice-President Sweezy in the chair, with the following members present, who reported as follows

The Wallson	Colonies. Spring. Fall.		Comb.		Pounds, Unsold.	
M. Adams	24	24	1,800	500	700	
F. Benjamin	- 5	14	500			
G. Blackburn	140	140	2,000	16,000	10,000	
O.J.Cummings	16	38	900		800	
H. W. Conklin	12	20	600	700		
D. A. Fuller	70	120	5,000	400	****	
R. Gammon	54	55	2,800	4,200		
L. Highbarger	. 40	70	2,000	1,500		
S. H. Herrick	22	37	800	325		
Wm. Hill	53	- 93	4,100	2,700	1,700	
V. W. Keeney	20	4.5	700	400	500	
A. G. Kallner	12	16	400	200	800	
B. Kennedy	33	65	2,700	150		
W. M. Rose	7	13	200	4444	****	
O. H. Sweezy	12	20	800		100	
C. H. Stordock	97	127	1.497	5,768	4,000	
M. S. Woodwor	th 17	25	800	****		
Chas. Winn		23	0.000	1		
R. Marsh	11	21	700			
W. A. Webb	1	7	100	180		
E. Whittlesey	50	78	1,500	1,100	800	
O. Taylor	45	83	2,900	****	2,000	
Totals	741	1,128	32,797	34.121	21,400	

POLLEN IN THE SECTIONS.

The first question was, "How to prevent pollen in the sections."

Mr. Gammon, of Roscoe, said that he had been troubled where he had hived swarms on starters; but only 4 or 5 swarms had troubled him.

Mr. Kennedy, of Milford, said that some of his old colonies had troubled him, but he could give no remedy.

Mr. Herrick, of Rockford, had had so little trouble that he would not bother with any prevention.

Mr. Whittlesey, of Seward, never was troubled in that way.

HOW TO PARTLY PREVENT SWARMING.

Mr. Hill, of Whiteside, said that he had clipped the queens' wings, hived side by side, and moved them in eight days. He tried all the methods that he had read of, and had decided that he might just as well try to keep young folks from marrying.

Mr. Gammon said that he had tried

combs when operating. This is the factory way to him was to put the old swarm on top of the new one, and extract from them; that is, to work them for extracted honey the rest of the season.

> Mr. Herrick said that his bees would swarm, but he put two or more new swarms in a hive, thus preventing a large increase, and making extra good colonies.

> The convention then adjourned until the afternoon, when it was called to order by President Highbarger.

> QUEENLESS COLONY-UNFINISHED SEC-TIONS.

> The first question in the afternoon was what to do with a colony that is queenless in the spring, which brought an almost unanimous reply, summed up as follows: Double up with one that has a queen.

> The next question was, "Will it pay to use the unfinished sections the following spring, after extracting the honey ?"

> Mr. Hill did not think that it would be as white.

> Mr. Gammon thought that by cutting down the comb very close, they could be used.

Mr. Herrick said that he had used them successfully by putting 2 or 3 sections in the center of the super, to coax the bees up.

President Highbarger thought that the honey was just as good, but in crating the combs they would appear to be tough.

DOES GOLDEN-ROD YIELD HONEY?

The next question was, "Have you had any honey from golden-rod ?"

Mr. Hill said that there was about 40 different kinds, and that the bees worked on some of them.

President Highbarger said that he never had seen the bees work on golden-rod.

Mr. Stordock's bees worked on it some, but he could not say that they gathered any great amount of honey from it.

Mr. Herrick never saw any bees on golden-rod.

EXTRA COMBS FOR EXTRACTING.

"Will it pay, when working for extracted honey, to have extra combs and supers, and not extract until the end of the season, or use one super and extract often ?"

Mr. Whittlesey said that he used extra supers, and did not extract until

Mr. Gammon thought that it paid him better to extract often, and save extra combs.

President Highbarger preferred to extract often.

The convention then adjourned unfor throwing sparks and ashes on the a great many ways, and the most satis- til Wednesday morning, Dec. 18, when the President called the convention to order.

BEE-DIARRHEA-CAUSE & PREVENTION.

Mr. Whittlesey said that it came from poor honey. Extract, and feed sugar.

Mr. Rice thought that dampness and poor ventilation had something to do

with it.

President Highbarger said that it was caused by poor honey.

EXTRACTED VS. COMB HONEY.

Mr. Blackburn said that his highest comb honey yield was 112 pounds per colony, while one colony stored almost 300 pounds of extracted.

Mr. Whittlesey said that from 15 colonies he obtained 1,100 pounds of extracted honey, and from 35 colonies, 1,500 pounds of comb honey. It had been a poor season for him.

The election of officers for the ensuing year was then held, and resulted as follows: President, S. H. Herrick, of Rockford; Vice-President, A. J. Sweezy, of Guilford; Secretary, D. A. Fuller, of Cherry Valley; and Treasurer, O. J. Cummings, of Guilford.

The next annual meeting was voted to be held at Rockford; the May meeting at Cherry Valley; and the August

meeting at Harlem.

The Association instructed the Secretary and Treasurer, after all expenses were paid, to send the balance in the treasury to Rev. L. L. Langstroth. The amount, with some donations, was \$5.85.

D. A. FULLER, Sec.

QUEEN-CELLS.

Questions about Eggs Found in Queen-Cells.

Written for the American Bee Journal . BY ALLEN LATHAM.

I was interested in what was said on page 800 of the American Bee Jour-NAL for 1889, concerning the placing of eggs in queen-cells. Mr. Dadant says that the size of the cell governs the sex, and thinks that the queen does not lay eggs in queen-cells. I have always been interested in this question; I believe it to be all nonsense to say that the queen does not lay in queen-cells. I have one or two queries which I should like Mr. Dadant to answer, viz:

1. If the workers place the eggs in old queen-cells, why do we never find them there when a queen is removed, and the bees go to work to rear another? Surely it would be easier to remove an egg than to build an entirely new cell.

2. Why, when foundation sometimes sags and leaves the cells nearly as large as drone-cells, does the queen lay eggs in those cells, which eggs develop into workers?

3. Has any one ever seen an egg in an old queen-cell (not a queen-cell made out of two or three worker-cells) in a hive without a queen, unless such egg may have been placed there by a lay-

ing worker?

What I wish to bring out by the above questions, is this: Eggs are found in queen-cells; they do not go there themselves; they are never placed there except when a queen is in the hive; and if a comb containing eggs is given to a queenless colony, none of these eggs are transferred to any queen-cells.

The above statements are conclusions drawn from my own experience, and I may be "away off," yet I have seen the same so many times that I feel pretty sure.

Cambridge, Mass.

WINTER.

How the Bees in Winter Quarters are Doing.

Written for the Prarie Farmer BY MRS. L. HARRISON.

It is a little past one p.m. and I made a call on my bees to say "How dy' do," and they answered only by a happy murmur. O, how I wish all my bee-loving friends could see my little pets in their cozy winter quarters. Today, Dec. 8, 1889, the thermometer stood at 48° in the bee-cellar, and at 72° in the shade out-of-doors. bees were carried in Dec. 5, which was a warm, pleasant day, and bees were Those to be removed upon the wing. were confined to their hives in the early morning, by closing their fly-entrance. It is so much nicer handling hives when they are clean and dry, than when covered with snow and sleet. And if the hives are frozen down they have to be loosened with a jar, which is very irritating to the inmates, and a person can handle them more quietly during mild weather than when pinched with cold.

There has been considerable said about lugging hives in and out of cellars, as though it was something terrible. Our cellar has no outside door, and the bees were handed in through a window. Two men put down 56 colonies in about two hours, and the assistant charged 75 cents for his labor. It would take several days to make them as comfortable upon their summer stands, and quite a job to un-

up the litter. The hives are two-story Langstroth, and only the lower one, containing the brood-nest, is put down.

I have room for only about half of the colonies of the apiary, and the remainder are to remain upon the sum-At the present writing it mer stands. seems like folly to store any of them, as this month thus far has been so very mild; but old Boreas may teach us, before long, that he has not entirely deserted this mundane sphere, and at all events preparations should be made for

his coming.

Some years ago I made chaff-cushions to protect the bees during winter. and by carefully housing them during the summer, they are still fit for use. Every fall new muslin sheets are spread over the frames, above the devices, and then the chaff-cushions are The bees propolize up the put in. muslin during the year, so that the moisture will not pass through it, and they will keep dryer if new is used for winter. And if they have eaten holes in the muslin, they will creep up under the cushion and large numbers perish, as they cannot find their way back. raise the cover slightly, so that there is at all times a free circulation of air above the cushion.

Occasionally during a very cold spell a cover has been shut down, and I invariably would find the cushion frozen and the cap full of frost, while those that were raised would be dry. I pre-fer to have the entrance fully open, and the back of the hive as high again as the front, so if frost gathers and melts in the hive, it will run out, and the bees can more readily carry out their dead debris.

Peoria, Ills.

LIQUID HONEY.

The Production and Marketing of Extracted Honey.

Written for the American Bee Journal BY C. E. WOODWARD.

It has taken the American apiarists a great while to decide that they have real use for the honey-extractor. Experimenting has demonstrated that honey-extracting is an economical proceeding, and, properly handled, is one of the greatest inventions in the beekeeping world.

The people of America seem to be awakening to the fact that the honeyextractor is suited to the wants of the honey-producing world; and if there is any one point that demands careful study, it is the manner in which extracted honey is placed upon the mar-ket, to meet the wants of the conpack them another season and clean sumer. Hence, too much attention has been given to our own ideas in trying to get the very last cent out of it possible.

Too cheap receptacles have been used, to a great extent, in placing extracted honey upon the market in very bad condition. Glass tumblers, holding one pound, are the best receptacles for extracted honey. Those glasses having a large mouth will allow the use of the contents in either the liquid or candied form. The glasses also show just what the honey is, and the variety of honey will present a nice appearance in them.

Owing to the convenience in which it can be handled, the cheapness with which it can be produced, and the fact that it is the only pure article strictly by itself-no intermingling of beeswax places it at the front as the most desirable honey for consumption. Comb honey is undoubtedly a thing of beauty; hence we believe that extracted honey can be produced in its best possible shape at one-half the cost of comb

honey.

It is an impossibility to adulterate honey so as to deceive. It has been said that "the American people love to be humbugged." You can fool the bee, but you cannot fool the people with adulteration of extracted honey. When the extractor is used, we can keep each variety of honey separate, and by itself in the majority of cases; hence I may say that, in my opinion, to make bee-keeping a grand success, is not to confine yourself wholly to comb honey production. The extrac-tor is here, and here to stay. Xenia, Ohio.

SEASON OF 1889.

Golden-Rod-The Bee-Keepers Union-Bee-Literature.

Written for the American Bee Journal BY J. B. SYPHRIT.

I commenced last spring with 19 colonies, and increased them to 38, by natural swarming. They are all in good condition. I put them into winter quarters on Nov. 28. I obtained 1,400 pounds of comb honey, and 600 pounds of extracted, mostly clover. The fall crop was cut very short, but I got some buckwheat and smart-weed honey.

I winter my bees in a cellar 18x32 feet, and 8 feet high, with a tile running diagonally, with ventilators of 4inch tile in the windows. All of our vegetables are kept in the same cellar; we go in and out from the outside, and the light does not seem to disturb the

I put nothing on the top of the brood-

this gives a good chance to feed next spring, to stimulate for breeding. I have wintered them in this way for a number of years, with good results. use the 10-frame Langstroth hive.

Regarding the golden-rod, I have watched it with a vigilant eye for several years, and have never seen a bee on it. I consider it, as a honey-plant, about the same as I do the potato-blossom. Sweet clover kept blooming for two weeks after our first frost. Nectar in white and Alsike clover was abundant the past season in southeastern Iowa. We have had a great number of basswood trees in this part of Iowa, but the woodman's axe is clearing them out by the thousands every year.

The principal part of my honey was obtained from Alsike clover. Comb honey has been selling in our home market as low as 8 cents per pound. I have sold none for less than 10 cents. Those bee-keepers who live along the Mississippi bottoms, obtain a very dark honey, but it seems to sell as well as the finest clover honey among home consumers. The weather has been very mild, with plenty of rain up to the present.

THE BEE-KEEPERS' UNION.

In viewing the list of members and last report of the Manager of the National Bee-Keepers' Union, I was struck with amazement when I beheld so small a fraction (about one out of every thousand) of the bee-keepers belonging to the Union. The light in which I view the Union is this: There is not one bee-keeper in the 300,000 but has received more individual benefit from the decision in the Clark case, than it cost annually to be a member. Every individual taking the AMERICAN BEE JOURNAL should be a member of the Union; and every man and woman that keep bees, should be a reader of the AMERICAN BEE JOURNAL. I could no more think of keeping bees without bee-literature, than I would think of farming without horses.

READING BEE-LITERATURE.

I often accost a man that keeps bees, thus: "See here; your bees are in a very bad condition. They are in old, rickety boxes; they are full of moths; they are too weak to accumulate nectar, and have many other faults. Now, see here; there is a weekly paper published that costs only \$1.00 a year. I will show it to you, and if you will take it, it will teach you how to handle bees, how to keep them in good condition, and how to make them a source of pleasure and profit to you." The reply is invariably embodied in this: "Well, I expect that is very nice, if I could have my bees as nice and clean fed, although there were not more frames, but leave the hive-caps on; as yours. I am keeping a few bees for than a quart of bees, and they lost

my own use, and it will not pay me." When I tell them that one colony cared for in the proper time and manner is of more value than twenty old, cracked boxes full of moths, they say, "Well, if I could handle them as you can, I would not mind taking it." But it is all in vain to try to get them to see that the bee-papers will teach them all this.

Newport, Iowa.

HONEY.

Not Digested Nectar-Report for 1889.

Written for the American Bee Journal BY J. A. MARSH.

The American Bee Journal is a most welcome visitor, and is read before any other of many periodicals. Many of its contributors are able and reliable, but one of the most able and respected has been very careless and unfortunate in the use of a word. When Prof. Cook calls honey "digested nectar," I hope that he will take back the "digested" part of it as grace-fully and as hastily as his motions will allow. The bees have no intricate patent; it is an open-kettle process, as old as Adam, and as simple as boiling maple-sap.

POOR SEASON, GOLDEN-ROD, ETC.

This has been the third poor season in this locality. May was dry, and bees found about enough honey until June 15 to meet daily wants; then it rained for 15 or 20 days, and, contrary to other bee-keepers, I have to say that my bees gathered honey while it rained, faster than at any other time; also, that gathered in the wet spell was the most beautiful honey; the sections were free from propolis, and the comb was light and white; while the honey gathered after-wards, was dark comb, heavy, and the sections daubed until they would break rather than part.

"Gill over the ground" is my best honey-producer, coming earlier and lasting longer than white clover, which comes second, while golden-rod amounts to nothing, as I never saw bees visit it, although I watched it daily in the hope that it would prove of some benefit; yet I think it a fit emblem of our glorious country, and I would cast my vote for it, if it was not for the "corner" that Mr. Prang seems to have on that privilege.

I started in the winter of 1888 with 3 colonies; a small swarm came to me on Feb. 15, 1889, which I hived and

their queen on April 2. I furnished eggs the next day, and they had a lay-ing queen by April 29. They dwindled until there were not more than a handful, but finally grew strong, and have now enough honey to carry them through the winter. I consider April very early for queen-rearing in Missouri.

I have now 14 colonies, half in good condition, and the rest short of stores. I take great interest in reading reports from all over the country. Let all bee-keepers report to the AMERICAN BEE JOURNAL

Scotia, Mo.

BEE-ESCAPE.

The Dibbern Bee-Escape Proves to be a Success.

Written for the American Bee Journal BY DR. G. L. TINKER.

As the weather was quite warm today, and the bees flying freely, I thought that it would be well to try the new bee-escape which Mr. Dibbern described on page 797 of the AMERICAN BEE JOURNAL for 1889, and has so kindly donated to bee-keepers.

I had a colony on which I had placed a section-case with partly-filled sections. I unpacked the hive, and took it off and put on the bee-escape, placing over it the case of sections, at 1 o'clock, p.m. There were about a pint of bees in the sections. At 4 o'clock, I looked, and found that every bee had gone below-not one was left.

Should this escape be as effectual as it now seems to me, it is going to prove of great value for getting bees out of brood-chambers, as well as out of sections.

The escape can be made in a 1-inch board, so as not to project on either side, and thus endanger killing bees in putting it on the hive, or having it bound down with propolis if left on the hive a day or two, as it would be if the cones projected below the board. I make mine as follows:

I have an inside cover to put on the hive in my winter-case. It is made of thin boards (\frac{1}{4} inch thick), and as long as the hive is wide. These are nailed to two cleats as long as the hive, and axl inch square. I bored a f-inch hole in the center of another thin board to fit in between the cleats. On this board was attached the cones. I then cut out a place in the cover, the same size as the cones. The board with cones was then nailed on so that the under surface of the cover was flat, or even where the cones came through. At the apex, I bored another &-inch hole through the cover, but not through

the board on top, This lower hole was where the bees came out.

On top of the upper board was nailed 4 cleats, 1x1 of an inch, about 7 inches long. These set up edgewise, one end against the cleats of the cover, and the other end close to the hole in the center. The 4 cleats thus converged about the hole so that the bees in trying to get out would all run, finally, into the hole in the center, and thus pass through each of the cones, and come out at the auger-hole below.

Between each of the long cleats of the cover, which are nailed on flush with the side, is nailed a piece of the same hight at each end, making a shallow tray 1-inch deep. The section-case rests on these cleats. It seems to me that the 4 converging cleats to the hole in the center will aid very much in getting the bees out of a case of sections speedily. Bee-escapes of the above description can be made for about 20 cents each.

I have been somewhat opposed to bee-escapes, to get bees out of sections, but this one is so cheap and easy to make, and withal effectual, that I believe it will come largely into use.

My favorite plan of getting bees out of sections has been to smoke them out, first smoking the bees down, then lifting off the case and standing it on end, on the front end of the hive. An assistant worked the smoker, blowing the smoke through the sections, while I used a little hand-broom to brush off the bees as they run out, down at the entrance. In this way comb honey can be taken off very rapidly-about as fast as the assistant can carry it away. My objection to this plan is the rough treatment that we are obliged to subject the bees to. It seems cruel to thus abuse them, and force them off from their honey.

The Dibbern bee-escape will not only save labor to the bee-keeper in taking off honey, but enable us to give our bees humane treatment at the same time

New Philadelphia, Ohio.

Convention Notices.

The next annual meeting of the Ontario Bee-Keepers' Association will be held in Belleville, Ont., in the City Hall, on Jan. 8 and 9, 1890. W. COUSE, Sec.

The spring meeting of the Northern Illinois Bee-Keepers' Association, will meet at the residence of D. A. Fuller, in Cherry Valley, Ills., on May 19th, 1880. D. A. Fuller, See

The Indiana State Bee-Keepers' Association, will hold its tenth annual meeting at Indianapolis, Ind., on Wednesday, Jan. 15, 1890, at 1 p.m. All bee-keepers are cordially invited.

GEO. C. THOMPSON, Sec., Southport, Ind.

The twelfth annual meeting of the Nebraska State Bee-Keepers' Association, will be held in the Lecture Room of Nebraska Hall of the State University, at Lincoln, Neb., on Jan. 15, 18 and 17, 1890. Every bee-keeper and lover of honey is invited to meet with us. The Horticultural Association meeta at Lincoln at the same time, and arrangements are now being perfected to hold joint sessions.

J. N. HEATER, Sec., Columbus, Neb.

The annual meeting of the Colorado State Bee-Keepers' Association, will be held in the Cham-ner of Commerce building. in Denver, Colo., on the hird Monday in January, 1890, for the election of fficers and other business. Everybody is invited to ttend.

The Eastern New York Bee-Keepers' Association, will meet in Convention, Jan. 20 and 21, 1890, in Agricultural Hall, Albany, N. Y., at 10 a.m. All interested in bee-keeping are cordially invited tatend. The Farmers' Institute is held at the same place on Jan. 22 and 23, 1890.

W. S. WARD, Sec., Fuller's Station, N. Y.

The 24th annual meeting of the Michigan State Bee-Keepers' association, will be held at Lansing, Mich., in the Capitol Building, on Dec. 26 and 27, 1889. At that time nearly all railroads sell half fare tickets; a few railroads charge one-and-one-third fare for the round-trip. Reduced hotel rates will be given at the Hudson House. All are cordially invited.

H. D. CUTTING, Sec.

The 21st annual meeting of the New York State Bee-Keepers' Association will be held in the Court House at Rochester, N. Y., on Feb. 5, 6, and 7, 1880. Reduced rates will be given at hotels and on all principal ratiroads. The programme and full particulars will appear in due time. Each county association is requested to send two or more delegates.

G. H. KNICKERBOCKER, Sec.

The annual meeting of the Vermont State
Bee-Keepers' Association, will be held at Burlington, Vt. on Jan. 21 and 22, 1890. Excellent hall accommodations have been secured at the VanNess
house. The Central Vermont Railroad has granted
round-trip tiekets from the following places: Ruiland, White River Junction, Cambridge Junction,
Richford via St. Albans, Ticonderoga, and all intermediate points, to Barlington and return for fare
one way. A good meeting is expected, and all are
invited. For further information and programmes,
apply to the Secretary,
J. H. Lahrabee, Larrabee's Point Vt.

Postal Notes are no safer to use in letters than bank bills. Any one can get the money on them. A Money Order can be obtained at the post-office or at the express office for 5 cents (only 2 cents more than a Postal Note), and is perfectly safe; if lost it can be re-issued.

HONEY AND BEESWAX MARKET.

DETROIT, Dec. 20.—Comb honey is dull and lower, now quoted at 12@14c. Extracted, 7@ 8c., with few sales, Beeswax is now in good de-mand, at 24@25c. M. H., HUNT, Bell Branch, Mich.

BOSTON, Dec. 26.—Sales are slow. Fancy white clover 1-lbs., 16@17c.; fair to good, 15@ 16c.; 2-lbs., 15@16c. Beeswax, 24c. BLAKE & RIPLEY, 57 Chatham St.

CHICAGO, Dec. 27.—White clover 1-lbs., 12 @13½c.; basswood, 11@11½c.; buckwheat, 8 @10c. Extracted, 8½@7½c. Beeswax, dark, 23@24c.; bright, 25@26c. 23@24c.; bright, 25@26c. S. T. FISH & CO., 189 S. Water St.

CHICAGO, Dec. 27.—Sales are light, at 12@ 12c. for white 1-lbs.; dark, 8@10c. Extracted dull at 6@7c. for dark, 7@8c. for fancy white, Beeswax, prime, 25c. R. A. BURNETT, 161 8. Water St.

KANSAS CITY, Dec. 24.—Demand is light and prices lower, owing to bee-keepers offering honey at 11@12½c, delivered throughout the West. Very fancy 1-lbs., 12 in a crate, 13 cts.: good, 12½c.; dark, 10c. Two-lbs., white, 12c.; dark, 10c. Extracted, white, 7c.; dark, 5@6c.

HAMBLIN & BEARSS, 514 Walnut St.

CINCINNATI, Dec. 24.—Demand for honey has been slow for a month or more, with a full supply of all kinds on the market. Extracted brings 50%c.; while comb is sold at 14@16c.—Beeswax is in good demand at 20@22c. for good to choice yellow. C. F. MUTH & SON, Corner Freeman & Central Aves.

MILWAUKEE, Dec. 27.—Market dull; only best grades demanded. White 1-lbs., 13@14c.; 2-lbs., 11@12c.; dark 1-lbs., 12@13c.; 2-lbs, 10@12c. Extracted, white, in barrels, 7@7½c.; in ½-barrels and kegs or tin. 7½@8c.; dark, in barrels, 6@6½c.; in kegs, 6½@7c. Beeswax, 22@25c.

A. V. BISHOP, 142 W. Water St.

CONVENTION DIRECTORY.

1890. Time and place of meeting.

Jan. 8, 9.—Ontario, at Belleville, Ont. W. Couse, Sec., Streetsville, Ont.

Jan. 15.—Indiana State, at Indianapolis, Ind. Geo. C. Thompson, Sec., Southport, Ind.

Jan. 15-17.—Nebraska State, at Lincoln. Nebr. J. N. Heater, Sec., Columbus, Nebr.

Jan. 20.—Colorado State, at Denver, Colo. E. Milleson, Pres., Denver, Colo.

Jan. 20, 21.—Eastern New York, at Albany, N. Y. W. S. Ward, Sec., Fuller's Station, N. Y.

Jan. 22.—Vermont State, at Burlington, Vt. J. H. Larrabee, Sec., Larrabee's Point, Vt.

Feb. 5-7.—New York State, at Rochester, N. Y. G. H. Knickerbocker, Sec., Pine Plains, N. Y. May 3.—Susquehanna Co., at Hopbottom, Pa. H. M. Seeley, Sec., Harford, Pa.

May 19.—Northern Illinois, at Rockford, Ills. D. A. Fuller, Sec., Cherry Valley, Ills.

In order to have this table complete Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.



Bees Bringing in Pollen.

On Sunday and Monday, Dec. 15 and 16, my bees, at my home apiary, were bringing in pollen. All the cranky uproar about bees being "a nuisance" here is a thing of the past.

Z. A. CLARK.
Arkadelphia, Ark., Dec. 20, 1889.

[We are glad to know that like "the starspangled banner," the bees are still there. Cranks may cause an uproar for a timebut it soon passes away, and they are likewise forgotten. The right, justice and truth are eternal, and though they may be "crushed to earth," they will rise again, and endure co-eval with the sun, moon and stars.-ED.]

Excellent Season for Bees.

Our bees are safely put away into their winter quarters in the cellar, with plenty of stores of their own gathering. This is the first time for three years that we have not had to feed them to carry them through the winter. The past season was an excellent one in the way of increase and the storing of honey; white clover yielded well, though basswood was a failure, and Spanishneedle did but fairly. From present indineedle did but fairly. From present indi-cations there will be an immense growth of young white clover for next season.

John Nebel & Son.

High Hill, Mo., Dec. 11, 1889.

Small Fruits and Bees.

I keep bees for both profit and fun. I have about five acres of small-fruit to handle, consisting mostly of blackberries and raspberries. I have now in the cellar 34 strong colonies. I started last spring with 12, and have taken off 1,100 pounds of comb honey. The "fun" comes from seeing the little army of bees working early and late, gathering the sweets that otherwise would go to waste in my berry-field, and at the same time increasing my chances for a full crop of fruit.

C. H. Pond.

Kasson, Minn., Dec. 7, 1889.

Kasson, Minn., Dec. 7, 1889.

A Boy's Experience with Bees.

"Jimmy, there goes an after-swarm to the woods. Catch them, and you may have them." I gave a chase, and succeeded, after a run of two miles, in heading them off in a cornfield, and by throwing dirt, made them return and alight on a bush by the way. I went to the nearest house, obtained a few rags, matches, and a little box, and then shook the bees on the ground, smoked them in, and returned home with my bees. I put them into a 9-frame Langstroth hive, and they rewarded me with 40 pounds of nice comb honey in one-pound sections, and I have a strong colony of Italian bees in good condition for wintering. I am 13 years old, and I think that I will make a bee-keeper. Father commenced the season with 18 colonies, increased them to 44 (minus my one nies, increased them to 44 (minus my one colony), and obtained 1,500 pounds of comb honey.

JAMES GARFIELD DAGGETT. Conrad Grove, Iowa.

Beginning in Bee-Keeping.

In the spring of 1888 I bought 2 colonies of bees in box-hives, and transferred them into Langstroth hives. I have now 18 colonies of hybrid bees. S. N. LITTLE. Pepin, Wis., Dec. 12, 1889.

Large Crop of Honey.

My report for the season of 1889 is as follows: I took 3,050 pounds of comb honey from 65 colonies, and 43,550 pounds of extracted honey from 285 colonies. FRANK MCNAY.

Mauston, Wis., Dec. 12, 1889.

Results of the Season.

Here is my report for 1889: I commenced in the spring with 38 colonies, increased them to 64, and took 1,300 pounds of extracted honey, and 1,200 pounds of comb honey in one-pound sections.

Geo. A. Kerr. Lowell, Mich., Dec. 12, 1889.

Wonderful Yield of Honey.

My honey crop was so large that I did not report it sooner, as I wish to be believed, or considered a man of truth. I took 4,500 pounds of extracted honey, and 3,500 pounds of comb honey—all from 37 colonies, spring count. Swanton, Iowa. E. S. HOVEY.

Honey Crop of South Dakota.

The honey crop in South Dakota was good, being mostly from milk-weed and golden-rod, and some parasite honey, in the form of honey-dew on box-elder trees, but of a dark color, and poor quality. Bees are flying briskly to-day.

R. A. Morgan. Vermillion, South Dak., Dec. 9, 1889.

Swarming Out-Extracting.

I started last spring with 17 colonies of bees, and my crop of honey was 1,500 pounds, all in one-pound sections. It was very dry here (Blue Earth county); the basswood crop was just fair, and the rest of the crop was all buckwheat honey. I did not get a pound of fall honey. I had a big time with my bees swarming out the past season—6 swarms swarmed out 13 times. My hives were all new ones, and clean. The queens' wings were all clipped except one, and that one went to the woods. My

bees are 20 rods from heavy timber on the north. I have a splendid location for bees. Some of the unruly swarms would leave after building comb for 3 or 4 days, and had 2,000 eggs laid. As they would try to leave, I would cage the queen and place her on the alighting-board, and they would have a good flight and then return. Some of the swarms settled 50 feet high; they would generally hang about 30 minutes, and back they would come.

My bees are all in the cellar but it is

My bees are all in the cellar, but it is hard to keep the cellar cool this winter, as the weather is very mild. A few days ago it rained, and the roads are terrible. Can honey be extracted from unfinished sections in the winter, if the sections are put in a warm room, about 80 degrees?

[Yes; honey can be extracted in a warm room, at any time.—ED.]

Bees Did Well.

My bees have done well this year. I started in the spring with 14 colonies in poor condition, 2 of them being queenless, but they built up and stored 867 pounds of honey in one-pound sections, and increased them to 21, all in good condition. I could not get along without the AMERICAN BEE TOWNSHIES STREW AUSTIN S. STRAW.

Edwardsville, Mich.

Bees Flying Freely.

One week ago to-day the bees were out and flying as lively as at any time in the summer, and some who had clothes out to dry, had to wash them over, as the bees spotted them badly. I was looking for the same thing, but failed to find where they had specked a thing, although they all have quite an amount of honey-dew for winter stores.

Harford Pa. Dec. 16, 1889 Harford, Pa., Dec. 16, 1889.

Poor Season for Bees.

My 27 colonies of bees are on the sum-My 27 colonies of bees are on the summer stands, and are in pretty good condition, though some may be short of stores, but I think that they have enough to last until March 1. They did not store 100 pounds of honey last summer on account of the cold weather the latter part of May and first of June; then I had to feed every colony to keep them from starving, and when honey came, with warm weather, the bees had no brood; so the result can be imag-ined.

Abe Hoke.

Honey from Golden-Rod. .

Union City, Ind., Dec. 15, 1889.

I vote for the golden-rod as our national flower, for my 53 colonies filled their hives to overflowing with honey from it last fall; some were so full that I had to extract some were so full that I had to extract some of it to get empty combs for the bees to cluster on in the winter. My crop of honey the past season was 1,500 pounds from 35 colonies, spring count. The season was too wet.

WM. B. McCormick.
Uniontown, Pa., Dec. 18, 1889.

Bee-Keeping in England.

The honey season here in England has been a good one, generally speaking. We had a beautiful spring—just the very thing to suit the bees, and consequently swarming was very prevalent, as the bees bred very fast. The early part of the season, and up to July 10, was everything that could he desired, when a sudden change came—rain, rain, was the order of the day,

so that practically the honey season was over for the year. Our "fall" (American) honey never amounts to much here, except in the heather districts. At this date very in the heather districts. At this date very severe frosts have set in, which is rather early for us, but our bees are all out-ofearly for us, but our bees are all out-of-doors, and some are in half-inch hives; but if all have plenty of good stores, they will undoubtedly come out all right in the spring. Starvation kills many more bees than cold, and last winter thinned the ranks of our bees sadly, thousands of colonies succumbing; but the past season has pretty well made up the deficiency by excessive increase. The American Bee Journal just fits a weekly vacuum here.

Henry Neve.

HENRY NEVE Warbleton, Sussex, England, Dec. 5, 1889.

Good Location for Bee-Keeping.

I commenced last spring with one colony of bees, and they increased to 5 by natural swarming. I obtained 130 pounds of honey in one-pound sections, and they yet have plenty to winter on. There was not much attention paid to bee-keeping here, until the last year. We have a good locality, I think, and I hope that we shall succeed well. There is an abundance of bloom all through the season; white clover, sweet clover and buckwheat are plentiful here.

F. R. Retter.

Phillips' Station, Nebr., Dec. 16, 1889

Phillips' Station, Nebr., Dec. 16, 1889.

Wet and Cold Season.

The past season here was wet and cold, but there was more honey in the flowers but there was more honey in the flowers than last year; and on days when the bees could work, they improved them to the utmost. My report is as follows: I commenced the season with 40 colonies, of which 3 were queenless; increased to 58, and took 1,400 pounds of comb honey, and 100 pounds of extracted from unfinished sections. All have a good supply of honey for winter.

East Hardwick, Vt., Dec. 12, 1889.

No Fall Surplus Honey.

I am a poor old soldier, broken down in health, and a bad cripple besides, and get only a small pension. I think that the AMERICAN BEE JOURNAL is the best published. My 32 colonies of bees are packed in chaff on the summer stands, with plenty of honey for winter. Bees got no surplus here the past fall, but there was a good yield from clover and other early flowers, with "bug-juice" mixed in from the beginning to the end; the result is a poor quality of honey, not fit for market, though I sell some of it for what it is, at a low price, This is the first poor honey I have ever got here.

JOHN I. MARTIN.
Falls City, Nebr., Dec. 14, 1889. Falls City, Nebr., Dec. 14, 1889.

Spider Plant, Alfalfa, etc.

I started with 7 colonies last spring, increased them to 14, and then doubled up until I reduced them to 10 colonies, which is a many as I want to keep. Bees had a is as many as I want to keep. Bees had a hard time the forepart of the season—one colony came pretty nearly succumbing, which it would have done, had I not come to their rescue with a little syrup. They supplied themselves the rest of the season, and gave me some honey for my buckwheat

In regard to the Chapman honey-plant, alfalfa clover and spider-plant, I would say that I had about 100 plants from the seed that I got from Washington, two years ago this winter. The bees just buzzed on it from morning until night. I think that

alfalfa is useless: I never saw a bee on it alfalfa is useless; I never saw a bee on it. Spider-plant is as useful for flowers as for honey, and a little more so. It is in bloom from the last of July until frost, and it is quite pretty. There is no honey gathered from it, except early in the morning and late at night. Now and then two or three late at night. Now and then two or three drops like large dew-drops on a head, can be seen, and on a great many days there are none to be found. The tallest Chapman honey-plant grew 5 feet, or over, in height, and the ball on the stalk is quite handsome. It lasted about three weeks.

Athens, N. Y. TELAH C. WHITING.

Glad to Help the Union.

I had 2 colonies in the spring, and now have 5. I am glad to contribute to the support of the Union, and send my dues support of the Union, and send my dues with this letter. I think that every man having one colony or more, ought to become identified with the Bee-Keepers' Union, so as to have our industry and pursuit recognized and protected as well as any other pursuit, for it is an honorable one. ISAAC B. LAING.

Olathe, Kans.

Honey in the Home Market.

I have been in the bee-business for sev I have been in the bee-business for several years, and have usually found it profitable. My report for 1889 is as follows: I increased my apiary from 40 colonies, spring count, to 75 colonies, by natural swarming; produced 3,000 pounds of comb honey, and 200 pounds of extracted honey, nearly all of which is unsold. I sell comb honey in the home market at 16 cents per pound. I have always sold my honey in the home market at remunerative prices, never having shiped a nound to the market of the market at the market at the market having shiped a nound to the market at the market having shiped a nound to the market have have been appeared to the market have the marke never having shipped a pound to the maket center.

J. W. WILLEY.

Lawrence, Kans., Dec. 5, 1889.

Old Colony-Good Honey-Flow.

In my article describing an "old colony," on page 745 of the Bee Journal for 1889, commencing with, "We had a very poor season here," the balance of the article should have been credited to me, instead of Mr. Rosenberger. I would like to hear from the readers of the American Bee Journal if any of them know of an older colony of

Bees go into winter quarters with plenty of honey this winter. We had the best flow of honey during the fall, that we have had for years. We hope for good results in wintering, and a good honey season in 1890, as the last four seasons have been rather bad for bees.

Oakfield, O., Dec. 16, 1889.

Golden-Rod and Warm Weather.

I shall order more Almanacs later; just I shall order more Almanacs later; just now I have no honey, and consequently I have no need to give to my customers until the spring crop is gathered. Golden-rod here is a good crop for bees in certain seasons, and at others bees gathered but very little from its this good is have a bare agreement. little from it; this year bees have gathered some surplus, while more than half of my bees just gathered enough to supply them until spring.

We are now having a very warm winter, the mercury being 70 degrees above zero in my store now. I feel uneasy about the warm weather, for if it continues so for a little length of time, our orange trees will soon blossom; then should a frost come, we can say "Good-bye oranges," for next year. ear. John Hager, Jr. Arabi, La., Dec. 10, 1889.

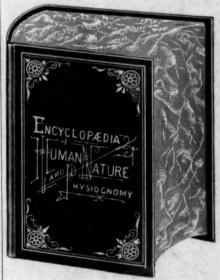
Golden-Rod as a Honey-Plant.

The past season was a poor one for honey in this locality. Everything looked favor-able in the forepart of the season for a large vield, as there was a large amount of whit clover bloom; but just as the bees were get-ting to work nicely in the sections, it began to rain, and it not only rained, but it poured, until about the middle of August, so that not only all storing of surplus ceased, but some colonies were nearly desceased, but some colonies were nearly destitute of honey in the brood-chamber at that time; when there was a change for the better, and we were favored with about three weeks of warm, dry weather, goldenrod was just coming into bloom, and the bees filled everything full from that source, so that they are in fine condition for wintering. I think that if Mr. Secor could have sent the bees at work we would have tering. I think that if Mr. Secor could have seen the bees at work, we would have had no doubts about golden-rod being a good honey-plant in this section, at least—though some seasons it does yield very little. The honey is thick, and of a bright-straw color; the flavor is rather pungent, though liked by some.

E. C. BOYD.

Wilmington, Vt., Dec. 12, 1889.

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